

³⁸Al

Guillemaud-Mueller et al. announced the discovery of ³⁸Al in the 1989 article “Observation of new neutron rich nuclei ²⁹F, ^{35,36}Mg, ^{38,39}Al, ^{40,41}Si, ^{43,44}P, ^{45–47}S, ^{46–49}Cl, and ^{49–51}Ar from the interaction of 55 MeV/u ⁴⁸Ca+Ta” (1989Gu03). A 55 MeV/u ⁴⁸Ca beam was fragmented on a tantalum target at GANIL and the projectile-like fragments were separated by the zero degree doubly achromatic LISE spectrometer. “[The figure] represents the two-dimensional plot (energy loss versus time-of-flight) obtained under these conditions after 40 h integration time with an average intensity of 150 enA. The new species ^{35,36}Mg, ^{38,39}Al, ^{40,41}Si, ^{43,44}P, ^{45,46,47}S, ^{46,47,48,49}Cl, and ^{49,50,51}Ar are clearly visible.”

Adapted from reference (2012Th10)

1989Gu03 D. Guillemaud-Mueller, Yu. E. Penionzhkevich, R. Anne, A. G. Artukh *et al.*, *Z. Phys. A* **332**, 189 (1989).

2012Th10 M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 933 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”